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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/691,389 | 10/22/2003 | Zhu Jian Zhan | 12553/104 | 7107 |

7590 10/04/2005

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EXAMINER

NGUYEN, DUNG V

ART UNIT PAPER NUMBER

3723

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,389

Applicant(s)

ZHAN ET AL.

Examiner

Dung V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-331 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8,9,12,13,18,19,21,24,26,27 and 31 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7,10,11,14-17,20,22,23,25 and 28-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 8, 9, 12, 13, 18, 19, 21, 24, 26, 27 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Mahadev et al (US 2004/0087253). Mahadev et al discloses a system for manufacturing a hard disk drive head slider 205b comprising an edge blending jig to bond a number of head sliders 205b for edge blending by lapping tape 203, wherein the blending jig is configured to receive a portion of lapping tape 203 between each of a number of the sliders 205b and to allow the lapping tape 203 to partially wrap an edge of each slider 205b, the edge blending is performed by relative movement or directional oscillation between the sliders 205b and the lapping tape 203, wherein a first angle between a first face of the slider 205b and the lapping tape 203 and with a second angle between a second face of the slider 205b and the lapping tape 203, the first angle and second angle is between 3 and 90 degrees, wherein the lapping tape 203 has a lapping surface covered with diamond powder having a grade less than 3 microns, wherein the lapping tape is greater than 1.2 millimeters in width, wherein a row bar is bonded to the edge blending jig and the row bar is separated into individual head sliders 205b by a slider parting tool. Mahadev et al

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also discloses a method for manufacturing a hard disk drive head slider comprising bonding a head slider row bar to an edge blending jig, separating the row bar into a number of head sliders 205b, inserting a lapping tape 203 between each head slider 205b bonded to an edge blending jig, adjusting the edge blending jig to cause the lapping tape 203 to partially wrap and edge of each slider 205b, edge blending the head sliders 205b by relative movement or directional oscillation between the slider 205b and the lapping tape 203 (note Fig. 3-6, paragraph [0020] to [0029]).

Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Mahadev et al (US 2004/0087253) as evidenced by Fukuroi et al (US 6,398,623). Mahadev et al discloses the claimed invention as described above, however, Mahadev et al does not specify that the parting tool as known in the prior art is a diamond cutting wheel. The parting tool as known in the prior art is a diamond cutting wheel as evidenced by Fukuroi et al (note col. 1, lines 22-33). Thus, the parting tool used by Mahadev et al inherently is a diamond cutting wheel.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahadev et al (US 2004/0087253). Mahadev et al discloses the claimed invention as described above, however, Mahadev et al does not disclose that a lapping tape has

a thickness between 40 and 100 microns. It would have been obvious to one having ordinary skill in the art at the time the invention was made of select the thickness between 40 and 100 microns, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Allowable Subject Matter

5. Claims 3, 4, 6, 7, 15-17, 20, 22, 23 and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 31 August 2005 have been fully considered but they are not persuasive. Applicant argues that Mahadev fails to teach or suggest partially wrapping a side edge between a front and rear face of each slider as claimed in claims 1, 18 and 31. Figure 4 of Mahadev clearly shows that tape 213 partially wraps a side edge between a front and rear face of slider 215b or slider 215c the same way that a tape 902 partially wraps a side of a slider 102 in figure 9 of the present invention.

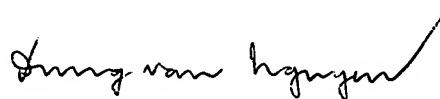
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V. Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on M-F, 7:00-3:30.

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8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DUNG VAN NGUYEN
PRIMARY EXAMINER

DVN

September 29, 2005